

APPLICANT(S): HAVIV, Yaron  
SERIAL NO.: 09/934,535  
FILED: August 23, 2001  
Page 2

### AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled. The following Listing of Claims is intended to replace any prior listings and/or versions of claims in the Application:

#### LISTING OF CLAIMS

1-10. (Cancelled)

11. **(Currently Amended)** A method for transaction-oriented communication between a client computer and one or more server computers, the client computer and the server computers having multi-channel reliable network hardware, the method comprising:

~~having a router process~~ monitoring network traffic over a connection ~~from a first between said client computer to a second computer, and said one or more server computers, wherein said network traffic includes at least one transaction initiated by said client computer, the transaction including a command portion and a data portion; both computers having multi-channel reliable network hardware;~~

~~based on a predefined policy, enabling~~ directing one of said server computers ~~second computer to directly transfer the data portion of said transaction data to said first client computer over said connection using remote direct memory access messages; and~~

~~having said router process non-remote direct memory access traffic processing the command portion of said transaction via a router on from said second computer to said first computer over said connection~~ between the client computer and said one or more server computers.

12. **(Currently Amended)** The method of claim 11, ~~wherein said router processes comprising processing~~ said network traffic within or above a transport layer only.

13. **(Currently Amended)** The method of claim 11, further comprising:

~~having said router filter~~ filtering said network traffic according to a said predefined policy.

14. **(Currently Amended)** The method of claim 11, further comprising:

~~having said router gather~~ gathering information on said network traffic.

15. **(Currently Amended)** The method of claim 11, further comprising:

~~having said router select~~ selecting one of said ~~second computer server~~ computers to receive said transaction from a group of computers having multi-channel ~~reliable network hardware~~ according to information in said network traffic.

16. **(Currently Amended)** The method of claim 11, further comprising:

~~having said router select~~ selecting one of said ~~second computer server~~ computers to receive said transaction from a group of computers having multi-channel ~~reliable network hardware~~ according to load-balancing considerations.

17-24. **(Cancelled)**

25. **(Currently Amended)** A method for transaction-oriented communication between a client computer and one or more server computers having multi-channel reliable network hardware, the method comprising:

~~monitoring converting~~ a session of packet-oriented network traffic ~~into transactions comprising remote direct memory access messages between the client computer and said one or more server computers;~~

isolating at least one transaction from said packet-oriented network traffic, the transaction including a command portion and a data portion;

sending said command portion to one of said server computers for processing;

and

converting said data portion to allow access to data of the transaction using remote direct memory access messages that are compatible with said multi-channel reliable network hardware.

26. **(Currently Amended)** The method of claim 25, wherein said packet-oriented network traffic is transport control protocol traffic.

27. **(Currently Amended)** The method of claim 25, wherein said ~~converting~~ isolating at least one transaction comprises:

~~terminating~~ collecting packets of said session of packet-oriented network traffic; ~~extracting data from said session;~~ and

marking a beginning and end of a state of said session to generate one or more stateless transactions each including a command portion and a data portion. ~~sending said data as remote direct memory access messages to memory of at least one remote node having multi-channel reliable network hardware.~~

28. **(Currently Amended)** The method of claim 25, further comprising:  
filtering said network traffic according to a predefined policy.

29. **(Currently Amended)** The method of claim 25, further comprising:  
gathering information about said network traffic according to a predefined policy.

30. **(Currently Amended)** The method of claim 25, further comprising:  
routing said transactions according to information in said network traffic.

31. **(Original)** The method of claim 25, further comprising:  
routing said transactions according to load-balancing considerations.

32-40. **(Cancelled)**

41. **(Currently Amended)** A system for transaction-oriented communication between a client computer and one or more server computers having multi-channel reliable network hardware, the system comprising:

~~one or more server computers having multi-channel reliable network hardware;~~ and

a proxy able to ~~receive~~ monitor a session of packet-oriented network traffic ~~from a client computer~~ between the client computer and said one or more server

computers, to isolate at least one transaction from said packet-oriented network traffic, the transaction including a command portion and a data portion, and to convert a session of said packet-oriented traffic into transactions comprising said data portion to allow access to data of the transaction using remote direct memory access messages that are compatible with said multi-channel reliable network hardware;[[,]] and

one or more routers to send said transactions command portion to one of said server computers for processing.

42. **(Currently Amended)** The system of claim 41, wherein said packet-oriented network traffic is transport control protocol traffic.

43. **(Currently Amended)** The system of claim 41, ~~further comprising:~~ wherein said one or more routers are able to process said transactions within or above a transport layer only.

44. **(Original)** The system of claim 43, wherein one or more of said routers is able to direct said transactions among said server computers according to information in said transactions.

45. **(Original)** The system of claim 43, wherein one or more of said routers is able to direct said transactions among said routers according to information in said transactions.

46. **(Currently Amended)** The system of claim 43, wherein one or more of said routers is able to direct said transactions among said server computers according to load-balancing considerations.

47. **(Original)** The system of claim 43, wherein one or more of said routers is able to direct said transactions among said routers according to load-balancing considerations.

48. **(Original)** The system of claim 43, wherein one or more of said routers is able to filter said transactions according to a predefined policy.

49. **(Original)** The system of claim 43, wherein one or more of said routers is able to gather information on said transactions.

50. **(Original)** The system of claim 41, wherein said multi-channel reliable network hardware is selected from a group including: virtual interface hardware, Infiniband hardware, Fiber-Channel hardware, small computer system interface hardware, asynchronous transfer mode hardware, expanded Ethernet hardware, and remote direct memory access over transport control protocol over internet protocol network hardware.

51. **(Currently Amended)** The system of claim 41, wherein said transactions are from a group including: database transactions, remote procedure call transactions, storage-access transactions, ~~and file-access transactions, and socket transactions.~~

52. **(New)** A system for transaction-oriented communication between a client computer and one or more server computers, the client computer and the server computers having multi-channel reliable network hardware, the system comprising:

one or more routers to monitor network traffic over a connection between said client computer and said one or more server computers, wherein said network traffic includes at least one transaction initiated by said client computer, the transaction including a command portion and a data portion,

wherein said one or more routers are able to process the command portion of said transaction, and, based on a predefined policy, to direct one of said server computers to directly transfer the data portion of said transaction to said client computer over said connection using remote direct memory access messages.

53. **(New)** The system of claim 52, wherein said one or more routers are able to process said network traffic within or above a transport layer only.

54. **(New)** The system of claim 52, wherein said one or more routers are able to filter said network traffic according to said predefined policy.

55. **(New)** The system of claim 52, wherein said one or more routers are able to gather information on said network traffic.

56. **(New)** The system of claim 52, wherein said one or more routers are to select one of said server computers to receive said transaction according to information in said network traffic.

APPLICANT(S): HAVIV, Yaron  
SERIAL NO.: 09/934,535  
FILED: August 23, 2001  
Page 7

57. (New) The system of claim 52, wherein said one or more routers are to select one of said server computers to receive said transaction according to load-balancing considerations.

58. (New) The system of claim 52, wherein said multi-channel reliable network hardware is selected from a group including: virtual interface hardware, Infiniband hardware, Fiber-Channel hardware, small computer system interface hardware, asynchronous transfer mode hardware, expanded Ethernet hardware, and remote direct memory access over transport control protocol over internet protocol network hardware.

59. (New) The system of claim 52, wherein said transactions are from a group including: database transactions, remote procedure call transactions, storage-access transactions, file-access transactions, and socket transactions.